

State or Country: off NW. Baja Calif., Mex Field No. S1070-22

County: Map: H.O. 5184, rev. V1, 1969

Locality: On abyssal plain off Patton Escarpment

Lat. 31° 19.7' N., Long. 119° 39.2' W.

Water: clear to 31° 08.2'; 119° 35.5'

Vegetation: (By Loran & D.R.)

Bottom: flat; mud (soft, not particularly green). Temp.: Over for intermediate

Shore: Current: Fires

Dist. offshore: 119-121 naut. mi. from mainland Stream width:

Depth of capture: 1968-2010 fath. Depth of water: est. 1968-2010 fath. DR

Collected by C.L. Hubbs, R.L. Wisner, R.R. McLoughlin & party

Tide: on S10 R/V Melville

Date: XII:18:1969

Method of capture: Otter trawl (ca 25-ft., light weight; lined w/ 2 ends)

Orig. preserv.: ~~Ammonium~~ *Thaumatichthys* in weak form. Time: 15:44 - ca 2150 (strengthened gradually); *Coryphaenoides* brought in

MV69-VI-9 in cold room (ca 38°) - desiccated slightly

Essential on course reciprocal to that of MV69-VI-8

65. *Thaumatichthys axeli* (Bourne) - identified by Bertelsen (67)
65. ~~Ammonium~~ specimen photographed promptly; X-rays by Wisner; these showed that a fish skeleton trawled was from adult of same type.

Specimen is S1070-22-651-1 (likely a holotype)

The skeleton is not a solitary coral saved in separate jar for ceratoid, vide Bertelsen. Tom Dana (turned over to Wm. A. Newman).
C.L.H.X: 1975

@ 10 gal. of invertebrates now in Scripps Benthic Invertebrate Museum (1-5-70)
Were washed out and handled by Spencer Luke

5 gal. of bottom material off shore given to geology.

Manganese nodules, asphaltic material (soft to brittle), some bored shale, 1 large piece of wood and fragments. Kept on ship at 38°F.

62 *Coryphaenoides yakuinae* 5 (275-390)

OVER

1737 Star fix $31^{\circ} 12' 7''$ N; $119^{\circ} 37.5'$ W.

1901 Loran + DR $31^{\circ} 08.7'$; $119^{\circ} 36.2'$

"Stop wind out" ~~200~~
2000 Loran + DR $31^{\circ} 10.0'$ $119^{\circ} 36.2'$

2149 " " $31^{\circ} 08.2'$ $119^{\circ} 35.5'$

56 Careproctus sp.?? On berry of large, eyed
fish eggs, taken by Richard S. Lee of Santa
Barbara Museum of Natural History
(so reported on Dec. 19). He has been
studying liparids and their reproduction
19 24 (275-736) larg. spec.
in tank

62 Coryphaenoides armatus ~~edgessorum~~ - about 2 dozen
23 et (324-658) 2 jars

medium to large adults, seemingly all
of one species.

One taken by John N. Carney and Steven Nelson
for brain study.

One taken by Richard S. Lee for Santa
Barbara Museum of Natural History

One promptly frozen for biochemical study of
lipids by Charles F. Phleger.

Other specimens laid out in plastic tray and
kept at ca. 38° , to be preserved at $5/10$.
Otoliths taken there.

Lee also reported sampling invertebrates, as follows:

Miscellaneous brachiopods — 5

Miscellaneous pelecypods — 5

Scaphopods — 5

Munidoid anomuran — 2

Holothurians — 4

Asteroids — 2

He indicated that he would send in
identifications

Cont.

MV 69-VI-9 (cont.)

Operation of the otter trawl:

Wire paid out at 60 m/min. to 8000 m W.O. while ship speed was held at ca. 3 knots.

Stopped pay-out and reduced speed to ca. 1 1/2 knots for 15 minutes, in hope to reach bottom.

Worrying over a possible "water haul" we decided on laying out 1000 more m rather than stopping ship (which might have cause otter boards to collapse).

After paying out to 9000 m W.O. net was towed for 15 min., while ship speed was held as nearly as possible to 1 1/2 knots.

The ship was stopped and net pulled in at 60 m/min.

The otter trawl was obviously operating well, for a large catch was obtained, with much mud and a large quantity of invertebrates.

25 The rapid pay-out and recovery almost eliminated midwater fishing. The pelagic catch consisted of 2 adult (41-51) lanternfish, Triphoturus mexicanus and a few red "shrimp." However, the trawl as soon as seen in the very clear water was well spread. (On the up-drag the lead and float lines may have been nearly collapsed.)

The large and diverse collection of invertebrates was very effectively cleaned out of the mud by use of a special washing device provided by Dr. Robt. R. Hessler.

Earl L. Hubbs.